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NGO Networks for Health

EMERGENCY CONTRACEPTION

At a glance

Worldwide, some seventy-five million women experience unintended pregnancies annually, roughly half of which end in abortion and most of which are performed under unsafe conditions. It has been estimated that as many as half of the unintended pregnancies that occur each year could be prevented through widespread access to and use of emergency contraception (EC), but health professionals do not routinely inform clients about EC or provide EC services. Both this issue of *At A Glance* and the accompanying complementary issue present solutions to these problems as given at a recent NGO Networks for Health seminar on the expanding role of emergency contraception in preventing unintended pregnancy.

Emergency contraception refers to "contraceptive methods that can be used by women in the first few days following unprotected intercourse to prevent unwanted pregnancy."[1] There are two types of emergency contraception: Emergency contraceptive pills (made from the same hormones used in birth control pills) and IUD insertion. Emergency contraceptive pills (ECPs) have been used since the mid-1960s when they were introduced primarily as a way to prevent pregnancy among rape victims. In 1976 the first IUD insertion for emergency contraception was reported, and in the 1980s a dedicated ECP product was approved for use in several European countries. The World Health Organization added two types of ECPs to its Model List of Essential Drugs in the 1990s, and the U.S. Food and Drug Administration (FDA) approved these same ECPs at the end of the decade. This article focuses on ECPs, the most widely available and widely used method of EC.

How Safe Are ECPs and How Do They Work?

According to the World Health Organization, there are no absolute contraindications for ECPs except pregnancy, listed as a contraindication not because it is *unsafe* to use ECPs but because ECPs are not *effective* once a woman is pregnant.[2] The FDA clearly states that ECPs do not interfere with an established pregnancy, nor is there any evidence that the hormone dose in ECPs would have an adverse effect on fetal development. As part of ECP screening, a woman's menstrual history should be taken to rule out potential pregnancy, but a pregnancy test is not required. If pregnancy cannot be ruled out with absolute certainty and a woman wishes to use ECPs, they should be provided as long as the woman understands that they will not work if she is already pregnant. It's important to remember that ECPs do not protect against sexually transmitted infections (STIs) and that providers should caution clients asking for ECPs that they may also be at risk for STIs.

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There are three ways in which ECPs are thought to work: (1) clinical studies show that ECPs can inhibit or delay ovulation; (2) there is evidence (but no clinical documentation) that ECPs cause endometrial alterations that may or may not be sufficient to inhibit implantation; and (3) ECPs may inhibit fertilization by thickening the cervical mucosa or by altering the tubal transport of sperm or egg, though this has not been documented clinically. Potential users need this kind of information about ECPs so that they can make an informed decision about their use. It may be helpful to clarify that ECPs are not the same as mifepristone (also known as RU-486), which is used after a missed menstrual period and causes an abortion. If a woman takes ECPs when she is already pregnant, the pills will not disrupt the pregnancy or harm the fetus in any way.

For maximum effectiveness, the first dose of an ECP should be taken within 72 hours of intercourse and a second dose 12 hours later. Since effectiveness diminishes over elapsed time from intercourse even within the 72-hour period, the earlier ECPs are taken the more effective they will be. Women should be advised that ECPs are less effective than almost all other methods of contraception for *regular* use; the reductions in pregnancy risks that have been documented were based on one-time, not repeated use.

The Two Types of ECPs

There are two types of ECPs: (1) one containing progestin only, which reduces the risk of pregnancy by approximately 85 percent and has relatively few side effects, with 23 percent of those taking it reporting nausea and only 6 percent reporting vomiting; and (2) one containing both estrogen and progestin (used in a treatment schedule known as the Yuzpe regimen), which reduces the risk of pregnancy by approximately 75 percent. Fifty percent of those using this regimen report nausea and 20 percent report vomiting.

Research is currently being done in China on a third-generation ECP with mifepristone as its active ingredient. The dosage of mifepristone used in this trial ECP is from 20 to 60 times *less* than that used for pregnancy termination and, when taken as emergency contraceptive, will not cause an abortion.

Client Concerns

Clients not only want information about ECPs (how to get them, when to take them, etc.) but are also concerned about the impact on childbearing, any threat to potential pregnancy, the risk of causing abortion, religious proscriptions, and the important question of confidentiality. Confidentiality and a nonjudgmental attitude on the part of providers are two key issues; unless women feel safe confiding in a provider, they may not avail themselves of the service or may delay seeking ECPs beyond the 72-hour time frame.

Prophylactic ECP provision, whereby women keep ECPs at home 'in case' they need them, is one way to ensure that women have easy access to this method. They are then able to use it soon after unprotected intercourse (when ECPs are most effective). Studies in the United States[3], Zambia[4] and Scotland[5] have looked at prophylactic provision and have found that women value easy access. The studies also have raised some questions that require further investigation, such as the ability or willingness of women to negotiate condom use with their partners and the impact on their ongoing contraceptive choices. The cost of prophylactic provision is an additional consideration because some women who receive the pills will not use them. In countries where ECPs cannot be obtained without

ECP Formulations

Source: "Emergency Contraceptive Pills: Medical and Service Delivery Guidelines," Consortium for Emergency Contraception, October 2000.

	Formulation Per Pill	Common Brand Names	First Dose No. of Tablets	Second Dose No. of Tablets
Levonorgestrel-only Regimen	All of these are dedicated products	Levonelle-2, NorLevo, Plan B, Postinor-2, Vikela	1	1
	LNG 0.03 mg These are regular progestin-only oral contraceptive pills	Microlut, Microval, Norgeston	25*	25*
	LNG 0.0375 mg These are regular progestin-only oral contraceptive pills	Ovrette	20*	20*
Combined Regimen	EE 50 mcg + LNG 0.25 mg ***or*** EE 50mcg + NG 0.50 mg PC-4 and Preven are dedicated products; the rest are combination oral contraceptive pills	Eugynon 50, Fertilan, Neogynon, Noral, Nordiol, Ovidon, Ovral, Ovran, PC-4, Preven	2	2
	EE 30 mcg + LNG 0.15 mg ***or*** EE 30 mcg + NG 0.30 mg These are low dose, combined oral contraceptive pills, not dedicated products	Lo/Femenal, Microgynon 30, Nordette, Ovral L, Rigevidon	4	4

Abbreviations: EE= ethinyl estradiol LNG= levonorgestrel NG= norgestrel

For all regimens, the first dose should be taken as soon as possible after intercourse, but optimally within 72 hours, and the second dose should be taken 12 hours after the first dose.

*Where no special formulation is available, these amounts are required.

a prescription, even the advance provision of a prescription form and information about the location of the nearest pharmacy or clinic provider should increase the ease with which a woman can obtain ECPs.

There are several misperceptions about ECPs: (1) that they are the same as abortion pills; (2) that their widespread availability encourages irresponsible behavior and adolescent sexual activity; (3) that men will refuse to use condoms; and (4) that women will adopt ECPs as their regular method or 'over use' ECPs. There is no evidence that people who are given easy access to EC make irresponsible decisions with regard to sexual behavior, nor any evidence that adolescents are more likely to engage in sexual activity because of the availability of ECPs. In addressing the condom issue, providers should promote EC as a backup to condoms, while the concern about overuse can be addressed through contraceptive counseling, emphasizing that EC is a less effective method of birth control when used repeatedly over time.

Key Policy Issues

Some of the key policy issues that need to be addressed are:

- *Access*—Who should be allowed to provide EC? Can pharmacists provide this method? Should ECPs require a prescription? Should community-based providers give out ECPs? To whom?

- *Awareness*—How should EC be promoted and to whom? Ministries of Health often prefer a low-key approach to mass media promotion, and yet mass media promotion may be most cost effective in light of studies showing that people don't know that this method exists.

- *Linkages*—How can ECP services be linked with other reproductive health services, such as ongoing contraceptive services, counseling, STD services, and services that deal with violence against women? Linkages and referral networks are important elements of any successful program.

For further reading

Consortium for Emergency Contraception, "Emergency Contraceptive Pills: Medical and Service Delivery Guidelines," October 2000.

Glasier, Anna, "Emergency Postcoital Contraception," The New England Journal of Medicine, October 1997.

"IMAP Statement on Emergency Contraception," IPPF Medical Bulletin, Vol. 34, Number 3, June 2000.

O'Brien, P.A., "Emergency Contraception with Levonorgestrel: One hormone better than two," British Journal of Family Planning, Vol. 26 (2), pp. 67-69, 2000.

"Randomized Controlled Trial of Levonorgestrel Versus the Yuzpe Regimen of Combined Oral Contraceptives for Emergency Contraception," The Lancet, Vol. 352, August 8, 1998.

"Time for Emergency Contraception with Levonorgestrel Alone," The Lancet, Vol. 352, August 8, 1998.

Websites:

Princeton University EC website:
http://www.not-2-late.com

Considered by experts to contain the most useful and current country-specific information about EC, including an up-to-date list of products available in each country.

Additional readings and website addresses are provided in the accompanying issue, *Programming for Emergency Contraception—At A Glance* and on our website:

http://www.ngonetworks.org.

[1] "Emergency Contraception," WHO Fact Sheet No. 244, June 2000.

[2] Ibid.

[3] Tina Raine et al., "Emergency Contraception: Advance Provision in a Young, High-Risk Clinic Population," Obstetrics & Gynecology, Vol. 96, Number 1, July 2000.

[4] Skibiak JP et al., "Emergency Contraception in Zambia: Testing Strategies to Improve Access to Emergency Contraception Pills," Population Council, March 1999.

[5] Anna Glasier and David Baird, "The Effects of Self-Administering Emergency Contraception," The New England Journal of Medicine, Vol. 339, Number 1, July 2, 1998.

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At a glance

NGO Networks for Health (*Networks*) is an innovative five year global health partnership created to meet the burgeoning demand for quality family planning, reproductive health, child survival, and HIV/AIDS information and services around the world. Funded by the United States Agency for International Development (USAID), the project began operations in June 1998. For more information, contact:

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Networks Technical Support Group encourages and supports health policy makers, program managers, and service providers to:

- become aware of the need to consider related social issues in all aspects of their work;
- understand that individual's perceptions can affect policy making, program planning, and clinical practice; and
- become comfortable in discussing a wide range of issues with colleagues, clients, and other persons at community levels as appropriate in their work.

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